

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1-51 are pending in the application, with 1, 9, and 18 being the independent claims. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Rejections under 35 U.S.C. § 103

On page two of the Office Action, claims 1-42 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over European Patent No. 1006697 to Azadet *et al* (herein "Azadet") in view of *Electrical Signal Processing Techniques in Long-Haul, Fiber Optic Systems* (AT&T Bell Laboratories) by Winter *et al* (herein "Winter"). Applicants respectfully traverse this rejection and respectfully request this rejection be removed and these claims be passed to allowance.

First, Applicants respectfully submit that neither Azadet nor Winter, alone or in combination, teach, suggest, or disclose "performing at least one M-path parallel digital process on the samples, wherein $M=kN$ and k is one of an integer greater than one and $1/s$, where s is an integer greater than one" as recited in currently amended independent claim 1. Neither Azadet nor Winter, alone or in combination, teach, suggest, or disclose digital signal processing where M does not equal N .

Second, Applicants respectfully submit that neither Azadet nor Winter, alone or in combination, teach, suggest, or disclose "an M-path digital signal processor coupled to the ADC array, wherein $M=kN$ and k is one of an integer greater than one and $1/s$, where s is an integer greater than one" as recited in currently amended independent claim 9. Again, neither Azadet nor Winter, alone or in combination, teach, suggest, or disclose digital signal processing where M does not equal N .

Third, Applicants respectfully submit that neither Azadet nor Winter, alone or in combination, teach, suggest, or disclose "means for performing at least one M-path parallel digital process on the samples, wherein $M=kN$ and k is one of an integer greater than one and $1/s$, where s is an integer greater than one" as recited in currently amended independent claim 18. Neither Azadet nor Winter, alone or in combination, teach, suggest, or disclose digital signal processing where M does not equal N .

Therefore, because neither Azadet nor White, alone or in combination, teach, suggest, or disclose all of the recited claim limitations of independent claims 1, 9, and 18 as amended, a *prima facie* case of obviousness has not been established. Amendment of claims 1, 9, and 18 does not add new matter, further clarifies the claimed invention, and is supported by the specification in at least paragraphs 0063, 0109, and 0170 as well as paragraphs 0075, 0108, 0115, and 0129. Furthermore, dependent claims 2-8, 10-17, and 19-51 which depend upon independent claims 1, 9, and 18 are thus allowable for at least being dependent from an allowable independent claim, in addition to their own respective features. Accordingly, Applicants respectfully request this rejection be removed and that these claims be passed to allowance.

On page thirteen of the Office Action, claims 43-51 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Azadet in view of Winter and further in view of *Multicarrier Modulation for Data Transmission: An Idea Whose Time Has Come* (IEEE Communication Magazine, May 1990) by John A. Bingham (herein "Bingham"). Applicants respectfully traverse this rejection and respectfully requests this rejection be removed and these claims be passed to allowance.

Dependent claims 43-51 which depend upon independent claims 1, 9, and 18 are allowable for at least being dependent from their respective allowable independent claims, in addition to their own respective features. Accordingly, Applicants respectfully request that this rejection be removed and that these claims be passed to allowance.

Other Matters

Applicants have amended claims 2 and 8 to correct grammatical errors and improve readability. These amendments are supported by the specification and have not been made to overcome prior art. Also, these amendments do not narrow the scope of protection. Thus, it is respectfully requested that all amendments be entered by the Examiner.

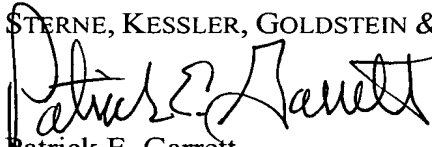
Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request the Examiner reconsider all presently outstanding objections and rejections and they be withdrawn. Applicants believe a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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